1127-60-291   **Bin Wang**, **Ruodu Wang**, **Yi Shen** and **Jie Shen***, 200 University Ave W, Waterloo, ON N2L3G1, Canada. *Compatibility for Change of Measures.*

We study the compatibility for change of measures in this paper. More precisely, for a given set of probability measures on a probability space and a corresponding set of probability distributions on the real line, we develop sufficient and necessary conditions for the existence of a random variable, such that under each measure given on the probability space, the distribution of this random variable coincides with the corresponding distribution on the real line, respectively. It is shown that the compatibility of these two sets of measures holds if and only if the Radon-Nikodym derivatives of the measures, with respect to some reference measures, satisfy a convex order condition. Furthermore, the result can be extended to continuous stochastic processes. (Received February 06, 2017)